## CLAIMS

We claim:

1. A router comprising:

a base having a base plate, the base plate defining an adjustment aperture;

a motor housing movable relative to the base along a first axis;

an adjustment shaft positioned substantially parallel to the first axis and rotatable to move the housing relative to the base, the adjustment shaft having a proximal end toward the base plate and a distal end away from the base plate, the adjustment aperture being aligned with the proximal end of the adjustment shaft and allowing insertion of an adjustment tool through the adjustment aperture to engage the proximal end of the adjustment shaft to allow an operator to rotate the adjustment shaft; and

an adjustment knob coupled to the distal end of the adjustment shaft and rotatable relative to the housing to allow an operator to manually rotate the adjustment shaft.

2. The router of claim 1, further comprising a hand grip attached to the motor housing and graspable by the operator to control movement of the router on a workpiece surface.

3. The router of claim 2, wherein the hand grip comprises an elastomeric material.

4. The router of claim 1, wherein the router is supportable on an underside of a support member.

5. The router of claim 1, wherein the proximal end of the adjustment shaft has a configuration, and wherein the adjustment tool has a configuration complementary to the configuration of the proximal end.

6. The router of claim 1, wherein the proximal end of the adjustment shaft has a surface, and wherein the adjustment tool has a surface complementary to the surface of the proximal end.

7. The router of claim 1, wherein the proximal end of the adjustment shaft has a polygonal surface, and wherein the adjustment tool has a polygonal surface complementary to the polygonal surface of the proximal end.

8. The router of claim 1, wherein the proximal end of the adjustment shaft has a hexagonal surface, and wherein the adjustment tool has a hexagonal surface complementary to the polygonal surface of the proximal end.

9. The router of claim 1, wherein the router is a fixed base router.

10. A router supportable by a support member, the support member having a top surface on which a workpiece is supportable, the router being supportable below the support member on an underside of the support member, the router comprising:

a base engageable with the support member below the support member and having a base aperture defined therethrough;

a motor housing movably supported by the base;

a motor supported by the motor housing and operable to drive a tool element;

an adjustment mechanism supported by at least one of the base and the motor housing for adjusting the position of the motor housing relative to the base and for adjusting the depth of cut of the tool element, the adjustment mechanism having a first shaft integrally connected with one of the base and the motor housing and rotatable about an axis, the first shaft having a first end engageable by an operator to rotate the shaft and a second end aligned with the base aperture and positioned above the first end when the router is supported below the support member; and

a second shaft having an actuator end engageable by an operator and an engaging end engageable with the second end of the first shaft, the engaging end being insertable through the base aperture from above the underside of the support member to engage the second end of the first shaft.

11. The router of claim 10, wherein the second end of the first shaft has a configuration, and wherein the engaging end of the second shaft has a configuration complementary to the configuration of the second end of the first shaft.

12. The router of claim 10, wherein the second end of the first shaft has a surface, and wherein the engaging end of the second shaft has a surface complementary to the surface of the second end of the first shaft.

13. The router of claim 10, wherein the second end of the first shaft has a polygonal surface, and wherein the engaging end of the second shaft has a polygonal surface complementary to the polygonal surface of the second end of the first shaft.

14. The router of claim 10, wherein the second end of the first shaft has a hexagonal surface, and wherein the engaging end of the second shaft has a hexagonal surface complementary to the hexagonal surface of the second end of the first shaft.

15. The router of claim 10, further comprising an adjustment knob coupled to the first end of the first shaft and rotatable relative to the housing to allow an operator to manually rotate the first shaft.

16. The router of claim 10, further comprising a handle coupled to the actuator end of the second shaft and engageable by an operator.

17. The router of claim 10, further comprising an adjustment column integrally formed with at least one of the base and the motor housing, the adjustment column being aligned with the base aperture.

18. The router of claim 10, wherein the router is a fixed base router.

19. A combination comprising:

a support member having an upper surface for supporting a workpiece and a lower surface; and

a router including

a base having a base aperture defined therein,

a motor housing supported by the base,

a motor supported by the motor housing and operable to drive a tool element,

an adjustment mechanism supported by at least one of the base and the motor housing for adjusting the position of the motor housing relative to the base and for adjusting the depth of cut of the tool element, the adjustment mechanism including a first shaft integral with one of the base and the motor housing, rotatable about an axis, and aligned with the base aperture, the first shaft having a first end engageable by an operator to rotate the first shaft and a second end, and

a second shaft having an actuator end engageable by an operator and an engaging end;

wherein the combination has a first orientation in which the router is supported on the workpiece, the workpiece being supported on the upper surface, and a second orientation in which the router is supported below the lower surface of the support member, the support member defining a first aperture from the upper surface to the lower surface through which the tool element is insertable to engage the workpiece and defining a second aperture from the upper surface to the lower surface aligned with the base aperture, the engaging end of the second shaft being insertable through the second aperture and the base aperture to engage the second end of the first shaft.

20. The combination of claim 19, wherein the second end of the first shaft has a configuration, and wherein the engaging end of the second shaft has a configuration complementary to the configuration of the second end of the first shaft.

21. The combination of claim 19, wherein the second end of the first shaft has a surface, and wherein the engaging end of the second shaft has a surface complementary to the surface of the second end of the first shaft.

22. The combination of claim 19, wherein the second end of the first shaft has a polygonal surface, and wherein the engaging end of the second shaft has a polygonal surface complementary to the polygonal surface of the second end of the first shaft.

23. The combination of claim 19, wherein the second end of the first shaft has a hexagonal surface, and wherein the engaging end of the second shaft has a hexagonal surface complementary to the hexagonal surface of the second end of the first shaft.

24. The combination of claim 19, further comprising an adjustment knob coupled to the first end of the first shaft and rotatable relative to the housing to allow an operator to manually rotate the first shaft.

25. The combination of claim 19, further comprising a handle coupled to the actuator end of the second shaft and engageable by an operator.

26. The combination of claim 19, further comprising an adjustment column integrally formed with at least one of the base and the motor housing, the adjustment column being aligned with the base aperture.

27. The combination of claim 19, wherein the router is supported on the lower surface of the support member.

28. The combination of claim 19, wherein the base is supported on the lower surface of the support member.

29. The combination of claim 19, wherein the router is a fixed base router.

30. A method of assembling a router, the method comprising the acts of:

providing a base defining a base aperture therethrough;

providing a motor housing;

providing a motor operable to drive a tool element;

providing an adjustment mechanism for adjusting the position of the motor housing relative to the base and for adjusting the depth of cut of the tool element, the adjustment mechanism including a first shaft and a second shaft, the first shaft being rotatable about an axis and aligned with the base aperture, the first shaft having a first end engageable by an operator to rotate the first shaft and a second end, the second shaft having an actuator end engageable by an operator and an engaging end engageable with the second end of the first shaft;

connecting the motor to the motor housing;

connecting the motor housing to the base such that the motor housing is movable relative to the base; and

integrally connecting the adjustment mechanism to at least one of the base and the motor housing such that the motor housing is adjustably movable relative to the base.

31. The method of claim 30, further comprising providing an adjustment knob and connecting the adjustment knob to the first end of the first shaft and rotatable relative to the housing to allow an operator to manually rotate the first shaft.

32. The method of claim 30, further comprising providing a support member, supporting the router below the support member, and engaging the engaging end of the second shaft with the second end of the first shaft.

33. The router of claim 30, wherein the router is a fixed base router.

34. A method of operating a router, the method comprising the acts of:

providing a router including a base defining a base aperture, a motor housing supported by the base, a motor supported by the motor housing and operable to drive a tool element, and an adjustment mechanism for adjusting the position of the motor housing relative to the base and for adjusting the cutting depth of the tool element, the adjustment mechanism including a first shaft integral with one of the base and the motor housing, rotatable about an axis, and aligned with the base aperture, the first shaft having a first end and a second end, the adjustment mechanism including a second shaft having an actuator end and an engaging end; and

performing one of a first depth adjusting act and a second depth adjusting act to adjust a cutting depth of the tool element, the first depth adjusting act including

rotating the first end of the first shaft in one of a first direction to increase the cutting depth of the tool element and a second direction to decrease the cutting depth of the tool element;

the second adjusting act including the acts of

grasping the actuator end of the second shaft,

inserting the engaging end of the second shaft into the base aperture,

engaging the second end of the first shaft with the engaging end of the second shaft, and

rotating the second end of the first shaft with the second shaft in one of the first direction to increase the cutting depth of the tool element and the second direction to decrease the cutting depth of the tool element.

35. The method of claim 34, further comprising providing an adjustment knob coupled to the first end of the first shaft.

36. The method of claim 35, wherein the first adjusting act includes the act of rotating the adjustment knob in one of the first direction and the second direction.

37. A router comprising:

a base for supporting the router on a workpiece surface;

a motor housing supported by the base;

a motor supported by the motor housing and operable to drive a tool element; and

a hand grip attached to the motor housing and at least partially formed from an elastomeric material, the hand grip being graspable by the operator and the motor housing being graspable through the hand grip by an operator to control movement of the router on the workpiece surface.

38. The router of claim 37, further comprising a handle connected to at least one of the base and the motor housing and graspable by an operator to control movement of the router on the workpiece surface.

39. The router of claim 37, further comprising first and second handles connected to at least one of the base and the motor housing and graspable by an operator to control movement of the router on the workpiece surface.

40. The router of claim 37, wherein the hand grip surrounds at least a portion of the motor housing.

41. The router of claim 37, wherein the hand grip has an inner surface engaging the motor housing and an outer surface engageable by a hand of the operator.

42. The router of claim 41, wherein the motor housing has an outer surface complementary to and engaged by the inner surface of the hand grip.

43. The router of claim 37, wherein the router is a fixed base router.

44. A router comprising:

a base for supporting the router on a workpiece surface;

a motor housing supported by the base;

a motor supported by the motor housing and operable to drive a tool element;

a handle connected to at least one of the base and the motor housing and graspable by an operator to control movement of the router on the workpiece surface; and

a hand grip attached to and surrounding at least a portion of the motor housing, the hand grip including an inner surface engageable with the motor housing and an outer surface engageable by a hand of an operator, the motor housing being graspable through the hand grip by an operator to control movement of the router on the workpiece surface.

45. The router of claim 44, wherein the hand grip is at least partially formed from an elastomeric material.

46. The router of claim 44, wherein the handle is a first handle, and wherein the router further comprises a second handle connected to at least one of the base and the motor housing and graspable by an operator to control movement of the router on the workpiece surface.

47. The router of claim 44, wherein the router is a fixed base router.

48. A combination comprising:

a router including

a base having a lower surface,

a motor housing supported by the base, and

a motor supported by the motor housing and operable to drive a tool element, the tool element being supportable to extend below the lower surface of the base; and

a base plate operable to support the router, the base plate having an upper surface and defining a recess extending from the upper surface, the router being supportable on the base plate with the lower surface of the base engaging the upper surface of the base plate and with the tool element extending below the lower surface of the base and into the recess.

49. The combination of Claim 48 wherein the base plate is formed by molding.

50. The combination of Claim 48 wherein the base plate defines a second recess configured to receive a tool for use with the router.

51. The combination of Claim 48 wherein the base plate is supportable on and connectable to a support surface.

52. The combination of Claim 48 and further comprising a case including

a first wall, and

a second wall movably connected to the first wall, the first wall and the second wall defining a cavity;

wherein the router is removably supported in the cavity.

53. The combination of Claim 52 wherein the base plate is removably connected to at least one of the first wall and the second wall and provides a bottom wall for the case, and wherein the router is supportable on the base plate in the cavity.

54. The combination of claim 53, wherein at least one of the first wall and the second wall defines a wall groove, and wherein an edge of the base plate is received in the wall groove to removably connect the base plate to the at least one of the first wall and the second wall.

5

55. The combination of claim 52, wherein the first wall and the second wall are hinged together and are pivotal relative to one another.